

FIG. 1

Table 1

Ex. No.	Comp.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Ex. No.	Components	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	
Rosin (KE604) ^a	40	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	
TPNB ^b	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	
Styrene dibromide	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Thixatrol + ^c	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
Isocarb 24 ^d	5																		
Isocarb 36 ^e	5																		
Isocarb ester 1605 ^f	5																		
Kristol T60 ^g	5																		
Paracera MW ^h	5																		
Iso stearic acid		5																	
Stearic acid			5																
Palmitic acid				5															
Micronised PTPE ⁱ					5														
200/100cS ^j						5													
Dow Corning 704 ^k							5												
Isofol 24 ^l								5											

^a Rosin (KE604) available from Arakawa is an acid modified hydrogenated rosin. ^b TPNB available from Dow is tri(propylene glycol) butyl ether.^c Thixatrol + available from Rheox is a rheological additive. ^d Isocarb 24 available from Condea is 2-decyltetradecyl ester.^e Isocarb 36 available from Condea is 2-hexadecyl eicosanoic acid.^f Isocarb ester 1605 available from Condea is 2-hexyl/decanoic acid-pentaerythritol ester.^g Kristol T60 available from Carless is mineral oil. ^h Panacera MW available from Industrial Waxes Ltd is paraffin wax.ⁱ Kristol T60 available from Carless is mineral oil. ^j Panacera MW available from Industrial Waxes Ltd is polydimethylsiloxane.^k Micronised PTPE available from Ranic Ltd is PTFE micropowder. ^l 200/100cS available from Dow Corning is Tetramethyltetra-phenyltrisiloxane and pentaphenyltrisiloxane^m Dow Corning 704 available from Dow Corning is 2-decyltetradecanol.ⁿ Isofol 24 available from Condea is 2-decyltetradecanol.

FIG. 2

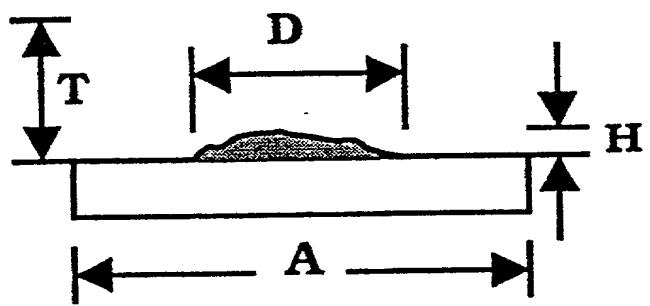


FIG. 3

Table 2

SCORE	DESCRIPTION	VALUES
1	No paste or almost no paste	$D < \frac{1}{2}A$ $H < \frac{2}{3}T$
2	More than $\frac{1}{2}$ of pad area covered but insufficient height	$D < \frac{1}{2}A$ $H < \frac{2}{3}T$
3	More than $\frac{2}{3}$ pad area covered, paste reaches same height as stencil	$D < \frac{2}{3}A$ $H = T$ for $< \frac{1}{3}A$
4	More than $\frac{2}{3}$ pad area covered and diameter of top is $> \frac{1}{3}$ of aperture	$D < \frac{2}{3}A$ $H = T$ for $< \frac{1}{2}A$
5	Perfect deposit, same shape as stencil aperture	$D = A$ $H = T$ for $> \frac{2}{3}A$

FIG. 4

TABLE 3

Example	Additive (%)	Score
Comparative	None	2
1	Isocarb 24	3
2	Isocarb 36	5
3	Isocarb ester 1605	4
4	Kristol T60	4
5	Pancera MW	4
6	Iso stearic acid	4
7	Stearic acid	3
8	Palmitic acid	4
9	Micronised PTFE	3
10	200/100cS	3
11	Dow Corning 704	3
12	Isofol 24	4
13	Isocarb 24 (2.5) / Isocarb ester 1605 (2.5)	4
14	Isocarb 24 (4) / Isocarb ester 1605 (1)	3
15	Isocarb 24 (1)	3
16	Isocarb 24 (20)	4
17	Isocarb ester 1605 (1)	3
18	Isocarb ester 1605 (20)	3